

CLAIMS

1. An optical disk drive, comprising:
 - a plate member disposed between an upper disk surface of an optical disk under rotation and a housing above the upper disk surface and extending
 - 5 along a direction crossing a disk track;
 - a space for guiding an air flow generated between the upper disk surface and the housing during rotation of the optical disk in between the disk upper surface and a lower surface of the plate member and in between an upper surface of the plate member and the housing; and
 - 10 a repetitive structure formed on edge portions of the plate member, the repetitive structure presenting a function of rectifying the air flow generated during disk rotation above the upper disk surface and extending along a direction crossing the disk track.
- 15 2. An optical disk drive according to claim 1, wherein the repetitive structure has a repetitive shape as viewed in plan.
3. An optical disk drive according to claim 2, wherein the repetitive structure has also a repetitive shape as viewed in elevation synchronized with the
- 20 repetitive shape as viewed in plan.
4. An optical disk drive according to claim 1, wherein the repetitive structure is formed on the edge on an output side of the air flow generated above the disk upper surface during disk rotation.
- 25 5. An optical disk drive according to claim 1, wherein the plate member is made of a metal plate not formed with a rib on the edge portion extending along

a direction crossing the disk track.

6. An optical disk drive according to claim 1, wherein the plate member is formed with a clamber, and the optical disk drive further comprises a drive
5 mechanism for rotating the optical disk in a state that the optical disk is squeezed between a turntable and the clamber.

7. An optical disk drive according to claim 6, wherein the plate member has an elongate plate shape, the clamber is held in a central area of the plate member
10 along a long side direction, opposite end portions of the plate member are fixedly supported, and the repetitive structure is formed on plate portions of the plate member on both sides of the clamber along the long side direction.

8. An optical disk drive according to claim 1, wherein the repetitive structure is
15 a repetition of convex stripes formed on the lower surface of the plate member and extending along a disk track direction.

9. An optical disk driver according to claim 1, wherein the repetitive structure terminates a repetition at a position of the edge portion corresponding to a
20 position detracted by a predetermined distance from an outer circumference of the optical disk.

10. An optical disk drive, comprising:
a disk tray having an opening extending along a direction crossing a
25 tangential direction of a disk track; and
a repetitive structure formed on opposite end portions of the opening, the repetitive structure presenting a function of rectifying an air flow generated

during disk rotation and having a wave shape as viewed in plan.

11. An optical disk drive, comprising:

- a plurality of convex stripes formed on inner surfaces of side walls of a
- 5 structural member defining a space for accommodating an optical disk, the
- convex stripes extending along a horizontal direction, protruding into the space
- and presenting a function of rectifying an air flow generated during disk rotation.